

REMARKS

Claims 1-5 and 13 were rejected as being obvious over Ross in view of Sato. Claims 7-11 and 14 were rejected as being obvious over Ross. These rejections are respectfully traversed.

In the Action of September 21, 2004, the Examiner acknowledges that "Ross et al. fail to teach the claimed Ra value of roughness. However, the reference does teach that surface roughness is a result effective parameter that affects stiction. As such, it would have been obvious to one of ordinary skill in the art at the time of the invention to determine the optimal Ra value for NiP layer taught by Ross et al." See page 5, lines 12-16, of the Action of September 21, 2004.

Applicants have argued against the Examiner's optimization arguments (quoted above) in the Amendment of December 7, 2004. Furthermore, Applicants submit that unlike what the Examiner had alleged in the Action of September 21, 2004, Ross does *not* teach or suggest that the NiP layer should have *any* optimal Ra value. In fact, Ross teaches in column 3, lines 61-65, that the layer of material to be laser textured, i.e., the NiP layer, can either have "a smooth surface" or "a small amount of roughness." *How can there be an "optimal Ra value for NiP layer taught by Ross," as alleged by the Examiner, when Ross itself states that the NiP layer be either smooth or rough?* The Examiner's position is akin to saying that there is an "optimal value" between "heads" and "tails" when one would toss a coin.

Ross discloses in column 3, lines 62-63, that it is preferable for the NiP layer to have "a small amount of roughness to lower stiction and friction." The Examiner has argued, as quoted above, that "the reference does teach that surface roughness is a result effective parameter that affects stiction." Even if Ross might teach that surface roughness is a result effective parameter

that affects stiction, the direction in which Ross suggests one should go to lower stiction and friction is in the direction of *increased* roughness as compared to “a smooth surface.” See column 3, line 62, of Ross; emphasis added. Ross does *not* suggest that one should decrease roughness to less than about 10 Å as recited in claims 1 and 7. So, why would persons of ordinary skill in the art “optimize” the roughness of Ross’ NiP by decreasing the roughness to less than 10 Å when Ross explicitly states that “a small amount of roughness” is good to lowering stiction as compared to “a smooth surface?” See column 3, lines 61-65, of Ross.

In the pending Action, the Examiner has provided slight different arguments to allege obviousness, stating (see the last paragraphs of pages 3 and 4 of the Action):

With respect to the claimed surface roughness (Ra) range, Ross et al. teach that it is preferred in their invention to provide a NiP surface that is smooth but in an alternative embodiment the NiP surface can be provided with "a small amount of roughness" in order to reduce stiction between the magnetic disk and the recording head (col. 3, lines 60-65). While the reference is silent with respect to the specific values of Ra that correspond to this above mentioned disclosure, it is the Examiner's position that the reference is suggestive of a range of Ra that is as low as Å. The reference teaches the preferred use of a smooth surface (i.e., this would ideally be 0Å) or the use of a surface having a small amount of roughness. Thus, it would have been a matter of routine experimentation for one of ordinary skill in the art to adjust the Ra of the NiP surface taught by Ross et al. to meet the disclosed surface requirements.

Let us carefully review Ross and see what it actually discloses. Ross discloses three embodiments. See column 2, line 16- column 3, line 65 of Ross. Out of these three embodiments, embodiment three is outside the scope of the claimed invention because it relates to just a sputter coated NiP layer (see column 3, lines 29-31 of Ross). Embodiments one and two relate to an electrolessly deposited NiP layer on a sputter deposited initiation layer of Zn, Ni, and

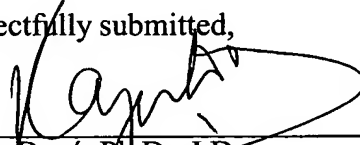
other elements and alloys listed in column 2, lines 20-21, of Ross. However, Ross clearly states for both embodiment one and two that "[t]he NiP layer is then polished and laser textured." Nowhere does Ross disclose "an as deposited composite nickel coating thereon including an electrolessly deposited nickel layer formed on a sputter deposited nickel layer" having "a surface roughness (Ra) less than about 10 Å" as recited in claim 1.

In light of this Amendment, a Notice of Allowance is respectfully solicited.

In the event that the transmittal letter is separated from this document and the Patent and Trademark Office determines that an extension and/or other relief is required, applicants petition for any required relief including extensions of time and authorize the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to

Deposit Account No. 03-1952 referencing attorney docket no. **146712011100**.

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Respectfully submitted,

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